France claims to have seventy-six millionaires.

The Rev. Dr. Storrs, of New York city, says that the principal duty of the college president these days is to get money for the college.

People who are alarmed about hypnotism should recollect, advises the Atlanta *Constitution*, that no person can be hypnotized for the first time against his will. Nobody is in any danger so long as he is unwilling to submit to a hypnotic operator.

The centennial of the discovery of coal in Pennsylvania will be celebrated in September next year. It was a hunter named Philip Ginter who made the discovery on Mauch Creek Mountain, in Carbon County, and therefore the proposed monument will be dedicated to his memory.

The Hudson's Bay Company is selling off its lands in the Northwest, and dividing the proceeds among the stockholders. Mild winters and changes in fashion have depreciated the value of the furs in its domain, and dealers have large quantities on hand. The company's lands, however, are increasing in value, being in demand for settlement.

The rules of the New York Coffee Exchange have been amended so as to make coffee from the East and West Indies, North, Central and South America a "good delivery," that from Brazil only having been a good delivery heretofore. The amount of coffee from these countries, estimates the *Farm, Field and Stockman*, will be 12,000,000 bags in lieu of 4,000,000 as the rule stood before.

It is to be hoped, remarks *West Shore*, that the seal skin sacques so coveted by the ladies may be more cheaply obtained in the future, since there is likely to be competition between the North American Commercial Company, and the Alaska Commercial Company, as the latter has recently secured a contract with the Russian Government, granting them the right to capture seals on the Siberian coast, while the former has the right of the United States for sealing in Behring Sea.

By the official "rough count" in the Census Bureau Chicago is entitled to the proud position of the second city in the Union, announces the New York *Tribune*. Her population is 1,098,576, which puts her 53,682 ahead of Philadelphia and leaves her former rival, Brooklyn, far in the rear. Chicago's growth in the ten years has been 118.32 per cent.—a percentage of growth never equaled or approached by any other great city and a marvel in itself. Now that Chicago is No. 2, it becomes her to brace up and prepare for a World's Fair that will do credit to the country and in particular to its second city.

The editor of the *Business Chronicle* learns from a St. Louis scientist that the catfish in the Mississippi River near that city have developed abnormally large pectoral fins, owing to the habit they have indulged in for several generations of putting their heads out of the steaming water during the hot months of a St. Louis summer and fanning themselves with those fins. The story is an interesting one as showing the effect of environment on the process of evolution, comments the New Orleans *Picayune*, but it gives one a poor opinion of the intelligence of a St. Louis catfish. There is nothing to hinder it from coming northward for a summer vacation. Many of the people of St. Louis can't get away in June, July and August, but the catfish can.

The census bulletin in regard to the indebtedness of the United States and the States makes a gratifying exhibit, observes the New York *News*. In the last ten years the aggregate State indebtedness has decreased about $58,000,000, while the United States has decreased its net debt $999,141,205. This is a showing which no other country in the world can equal. Every section of the country has taken part in this decrease of indebtedness. In most of the States the indebtedness has been reduced by the use of the revenues not needed for current expenses. But in a few States the apparent decrease of the debt has arisen from the scaling down of the old debts. The State having the largest indebtedness is Virginia, which figures to the amount of $31,525,535. Altogether the financial exhibit of the nation is one that it may well be proud of.

The new French Giffard gun, for which the inventor has received a prize of $2000 and a gold medal, is discharged by the expansion of a liquefied gas. A single drop of the liquid furnishes the charge for a steel cartridge. Of course, the gun is noiseless. It is said to be also cheap and convenient; odorless as well as smokeless. The French Government will test its practical ability. When the inevitable and long-impending conflict of foreign armies take place, *Frank Leslie's* is of the opinion that the world will watch with interest many experiments with weapons devised of late years. With great armies equipped with the newest and most destructive engines of war, conflicts will be shortened. Perhaps one of the results of the inventions of formidable war machines will be a more favorable leaning toward international arbitration in the Old World.

AZORE ISLES.

A PARADISE FOR WEARY BRAINS AND BODIES.

Primitive Life and Manners of the Natives—Plenteous Flowers—Unique Attractions of Madeira.

"A trip to the Azores on a sailing vessel offers the seeker of recuperation something wholly unhackneyed and also a larger amount of 'outing' for his money than he could get in almost any other direction," said Colonel John C. Bundy in speaking of a twenty-one days' sail which he took, shipping from New Bedford, Mc., and sailing to this picturesque little group of islands. "Of course," he continued, "like most things in life, this trip has its drawbacks, but if one is in need of perfect rest and can abandon himself to inertia, the sea and the wind, or the absence of it, he might fare worse, although he could hardly go farther for the sum of $125, which is the price of the round trip ticket from New Bedford to the Azores and return.

"To be sure there is absolutely nothing to vary the monotony of the voyage, save perhaps when a log covered with barnacles is seen floating near and a fishing expedition is quickly fitted out to capture the sea bass or 'log fish' as the sailors call them, that are always in the wake of a barnacle covered log, or some

AN AZOREAN PLOW.

other equally unimportant incident, a trifle out of the common, occurs. The passengers of these sailing vessels are usually a half dozen invalids who are seeking the health which they have failed to find on land, and a few Portuguese, natives of the Azores, in the steerage, who having made their 'stake' are returning to their homes to enjoy a life of affluence. The amount which makes them nabobs in their native isles is from $1500 to $2000, and having acquired this sum their ambition is wholly satisfied and they return to take their places as capitalists among the simple people whose riches consist rather in their few wants than in the magnitude of their possessions.

"The volcanic origin of the Azore Islands gives them a wild and rugged picturesqueness which is a singular contrast to the wealth of luxuriant flowers in which they abound. Quite a distance out to sea one can catch the perfume of these flowers and on the islands it is unpleasantly oppressive. Hedges of geraniums, fuchsias and heliotropes, five and six feet high, fringe the roads about the country, and on the mountain sides they are wonderfully effective. Every house has its flower garden, either large or small, and it is doubtful if anywhere in the world there is such prodigality of bloom to the square inch.

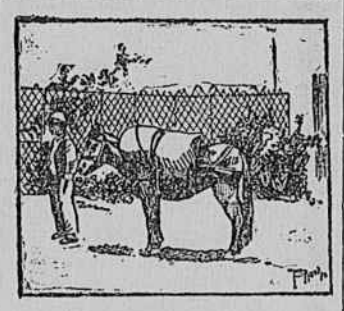
"It is a singular fact that although there are those constantly returning who have been in touch with the world beyond these queer little islands, they make no effort to alter anything when they return and, possessed with the spirit of content, which has its abiding place there, they take their place among those who are utterly unconscious that the world beyond the ocean which surrounds them has moved on, and, as it were, left them back among the centuries.

"The plow which is used here is a rude wooden contrivance, drawn by an ox and managed usually by a woman. Both the men and women work out in the fields, with no protection whatever, but when there is a holiday, or on Sunday, they all carry umbrellas, as they are considered a badge of gentility, and whatever they possess or lack, an umbrella is considered a necessary part of holiday attire. A special indication of either wealth or position is a cloak with a capote attached. The capote is a huge affair in which the wearer's head is quite lost. This is the one chic, always fashionable, ever stylish mode for the female population of Azores. It is handed down from one generation to another as a precious heirloom and is worn year after year with the satisfying consciousness that it is the most fashionable and desirable of garments.

NATIVE OX CART.

"The dwellings are play house imitations of the castles of the middle ages, covered with tile and for the most part without chimneys. In some of them there is an extension for cooking, and whether or not this is added the smoke must escape through the tiles. The ox cart is the favorite vehicle and is similar to a stone boat. Two cows and sometimes two donkeys are harnessed to these sledges. However, the greater proportion of the farm produce is brought into the cities in baskets on the heads of the peasants or on little donkeys. Speaking of farm products reminds me of the fruit. It is most disappointing, the flavor being very inferior, although the fruit is abundant and is semi-tropical.

"Madeira is similar to the Azores in all important respects, although from the sea it is not as picturesque as either Flores or Fayal. I shall not soon forget the way in which we were conveyed from the wharf to the hotel. The vehicle was a queer-shaped affair made of willow and set on runners and was drawn by oxen. Seated in state in this unique carriage we were hauled up to the hotel. Even more out of the common than this unusual conveyance was the way we made the ascent and descent of Mount Church. There were seven of us, and we had three hammocks and two sledges, together with six bullocks and fifteen men to get us up and back. The men conveyed the hammocks, in which a part of the party preferred to go, and the bullocks hauled the sledges. The view was magnificent all the way, and among other things as we were making the ascent we saw a queer bit of harvesting. A woman and three children were carefully pulling up the ripened grain, one stalk at a time. We all returned in sledges, and this was the odd and interesting part of our trip. We came down as children ride down hill in the winter time, only we came over a stone pavement at such a rate that the burning runners left a line of smoke behind them. The sledges were guided by men on either side, who, when it was not very steep, ran beside the sledge, and when the descent was more precipitous



A DONKEY AND HIS LOAD.

rode with one foot on the runner and the other constantly touching the ground. The distance, which it took us an hour and a half to make going up, we were just twelve minutes in accomplishing in coming down. I really don't think there is a finer bit of a sort of all-the-year-round tobogganing to be found anywhere than on Mount Church. It is really great sport and not especially expensive.

"Some idea of the simple frugality of the peasantry of these remote islands can be gathered from the fact that the old gardener who had charge of the hotel garden received thirty cents a day, and he had a wife and ten children who shared his income. A good seamstress receives thirty cents and a laundress twenty-five cents a day. As far as cheap and faithful service is concerned these islands are certainly a veritable Eldorado.

"Another attraction is the charming climate, which varies but a few degrees from January to December, save when the 'leste' or hot wind from Africa sweeps over the islands, as it does occasionally. There was one of these winds while I was there and a cloud such as comes with a cyclone first appeared above the mountains, and then the fierce and terrifically hot blast began to blow. These windstorms are, however, of brief duration and not of frequent occurrence, and the soft, perfume-laden air, the Eden-like simplicity and the old-time frugality which prevail, the cheap and easily-obtained service, the beautiful scenery and ocean-bound quiet make these islands in their way unique in attraction. Withal the hotel service is good, and however one wants to live and whether he wants simply a season of complete rest away from this work-a-day world to pursue literary work, or philosophical research or to experiment in flower farming, the Azores and the islands in their vicinity offer golden opportunities."—*Chicago Herald.*

Provide a Variety.

A few weeks ago we printed the complaint made by a mother who had tried in vain to keep her family around the home hearth in the evenings.

She had taken care to see that the hearth was clean, the fire warm, the room inviting, and had arrayed herself in her brightest smiles and prettiest gown; but all to no purpose. As soon as dinner was over, her husband rushed away to his office, her boys to their clubs, her girls to a neighbor's house and she was left alone. She hinted that her experience was that of many other mothers.

Perhaps these neglected mothers may find a useful hint in the old story of "Lady Hay," who was banished by her ungrateful husband "because her monotonous goodness put him to sleep."

The Greek who cast his vote against Aristides because he "was tired of hearing him called the Just" had the same impatient temperament which is shared by many of his brother men to-day.

Nor is the weariness of monotonous virtues unnatural or altogether unjust. If one of these neglected mothers were nursing a sick child, she would provide it with a constant variety of dainty dishes, knowing that the appetite soon rejects the same unchanged food and that the body suffers in consequence. She ought to know that the brain craves a change of thought as the body does of meat.

"It is the strange broth that satisfies the palate" is an old proverb that suits the mind as well as the flesh.

If the mother and sisters wish father and brothers to stay at home during the evenings, they must bring some novelty, some piquancy, some fresh air into the house. The effect will be wholesome for their own lives, as well as for the men of the family.

Every household is likely to fall into ruts of thought. Conversation about the affairs of the kitchen, the neighborhood, or even the church, fancy work, or the half-dozen tunes which the girls know on the piano are apt to pall upon the taste of school and college boys. Their own gossip about baseball or their fraternity concerns is not a whit more elevating, but—it interests them.

The gray-haired mother of four sons at Yale amazed a visitor by her familiarity with the records of boating clubs for many years. "How can you load your memory with such worthless rubbish?" she was asked.

"It has helped to keep my boys close to me during their whole college life. Is that worthless?" she replied.

But boys and men should remember that it is not the duty of the mother and sisters alone to bring variety and charm to the family life.

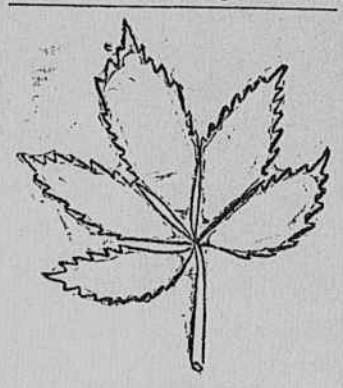
If home bores them, let them at once go to work to make it less wearisome, for they may be sure that when old age or death comes to them it will be to that old home their thoughts will turn, not to school, nor the base-ball ground, nor the club.—*Ex.*

Cupid is the divinity who presides over love matches. Of marriages for money the patron saint is Cupidity.—*Judge.*

How to Distinguish Poisonous From Harmless Shrubs.

At the season of picnics, vacations and rambles in the country, writes a Chicago doctor in the *Inter-Ocean*, thousands of women and children, and some men, become poisoned by contact with or the exhalations from poison ivy or poison oak. The poisonous effects of both the ivy and oak (rhustox and R. ven.) are often very distressing, and so severe as to disable the victim from work for a long time.

People could easily distinguish these poisonous shrubs and vines if they would learn the differences in appearance. Children should be early taught to tell the harmless woodbine from the ivy. They have but to remember that the woodbine or Virginia creeper has five leaves, while the poison ivy has but three. I send you drawings of all three.



LEAF OF WOODBINE.

This vine (the leaf in illustrations one-third actual size) is not poisonous.

POISON IVY.

Old and young leaves of poison ivy (rhustox). The older leaves are bluntly serrated. The young leaves have their edges smooth.

POISON OAK.

This illustration shows the leaves and stem of poison oak or poison sumach (rhus venenata.) The edges of these leaves are not notched. The stem is bright red, and the leaves are much smaller than those of the common sumach.

The rhus aromatica resembles rhustox, so nearly that it is difficult for a novice to see the difference. This species emits a pleasant odor when bruised, and the berries are very sour. It has no poisonous effects.

Lost to Sight.

General Sheridan was not a tall man, though he had a commanding presence. While he was an under-officer, he was one day drilling a company, and was annoyed by the unsoldierly appearance of a tall, round-shouldered Irish recruit.

"Don't stand in that way," Sheridan finally exclaimed, "You look like a Chinaman doubled over a wash-tub. Straighten up—form erect, chest out and chin elevated. Like this!"

Then the officer gave the man a superb example of the perfect soldier in parade movement, his eyes fixed unalterably away from earthly things.

"An' it's shtraight ahid I'll be afther lookin' all the toime?" asked the recruit, glancing down at his superior officer, with a twinkle in his eye.

"Yes; if you mean to be a respectable soldier, certainly."

The Irishman puffed himself out like a pigeon, and stepping off to the measured "Right!" "Left!" he exclaimed, "Well, good-boi to ye, Leftenant; I'll niver see ye agin."

A Weighty Question.

Stout Lady—"Now I've got to the bathing-house, how in the world am I going to get inside?"

A mountain lion met a book agent on the mountains above Park City the other day. After gazing into each other's eyes for a few minutes, the lion blushed and slunk away.

HATCHING SALMON.

PROCESS FOLLOWED AT ONE OF UNCLE SAM'S HATCHERIES.

Millions of Fish Annually Added to the Supply of Rivers and Lakes—The Young Fry at Home—Transporting Eggs.

Swimming in a small stream, distance from the sea about thirty miles, and from the river where they were caught three miles, near Bangor, Me., are about two hundred robust salmon, male and female, the property of the United States and of the State of Maine, all of which are soon to have the assistance of man in producing millions of their kind. They swam in from the sea this spring with thousands of others, weighing on their arrival about twenty-five pounds each, and had they avoided the fish weirs of the fishermen, would have deposited spawn and milt along the spawning beds prepared by nature, where fully two-thirds of it would have been devoured by eels, suckers, chubs, pickerel and other fish. But they were caught alive, tenderly transferred to submerged cars, which were afterward towed inland, and now, in their narrow quarters, are being carefully tended. They are in what is known as Craig Brook, the only sea salmon hatchery place in the world.

At this place, in years past, Uncle Sam has expended many thousands of dollars in experiments, and here, too, millions upon millions of fish have been artificially brought into being and have been distributed in the waters of Maine and sent abroad to England, Germany and Australia.

The fish, two-thirds of which are females, are purchased late in June and early in July, and until October are allowed the freedom of the river for a distance of a quarter of a mile. The bed of the river is of mud and not at all to the liking of the salmon, which will make no attempt to spawn thereon, but at the upper end there is another and a much smaller inclosure, having a bottom of gravel. Into this comes the female when "ripe," or ready to deliver a portion of her eggs, and following her is seen the male salmon. About this time one of Uncle Sam's dip nets is placed under her, and she is lifted, flapping and fighting mad, to the bank. Then thousands of eggs are forced into a broad and shallow tin pan underneath and the and the fish is again placed in the water. The male fish is similarly treated.

Enough eggs only are taken to cover the bottom of the pan. They are of a gelatine-like substance, soft and flabby. In each there is a minute opening, and the milt, spreading over them as oil spreads over water, enters each aperature. Soon the eggs take on a yellow hue, assume the firm shape of the pea, and grow brittle.

The salmon egg at first is not unlike glass and will not bear transportation. Frames about eighteen inches square, in which are stretched fine wire screens, are brought out, and on these the eggs are placed. These frames are termed trays, and are not unlike household wire screens. Perhaps they are piled one dozen high, taken into the hatching house, and submerged into water. This hatching house is at the foot of a dam, and water flowing down into it fills large wooden troughs to a depth of several feet. Thus the eggs are in gently-moving water, the temperature of which grows lower as the winter approaches. The process continues until all the eggs have been taken from the female and all the milt from the males, when they are allowed to return to the sea. When bought, every fish is weighed and given a ledger account, and before he or she is allowed to depart, a credit is given and the account closed.

About the first of the new year there appears upon such eggs what is known as eye spots. At this stage the eggs look like black-eyed peas and can be frozen, shaken, or transported with safety. In March or April, according to the warmth of the spring, the submerged egg begins to assume the shape of the pollywog—all head and tail—and about half an inch in length. This change is brought about by the temperature of the spring water alone. The fish seems to be born of part of the egg, the remainder seems to anchor him, and on this he feeds for a while, the anchor growing less each day and the fish larger. It is a wonderful provision of nature that with the egg is given forth food for the period the young salmon is helpless.

In May or early June the attachment has been eaten, and the pollywog-like fellow looks something like a fish. Now comes the time for distribution. Large cans of the capacity of a flour barrel are brought forth, and into these the small fry are dipped with a good supply of water, and taken where desired. Maine takes from 250,000 to 500,000 each year. In times past these have been let go in the Penobscot and St. Croix Rivers, and as a result tons of twenty and thirty pound salmon are taken each season, being a large source of revenue to coast fishermen, and commanding in the early season $1 per pound or more, in Boston and New York markets, though later the price at home rules as low as fifteen cents per pound per fish.

One peculiarity of the fish is noticeable. Let 100,000 small salmon be placed in the Penobscot River, a like number in the St. Croix, and in the River St. John, in New Brunswick, and in time, when they are grown to a spawning age, each fish that returns will seek his native river. Then, too, the flesh of the fish differs with the rivers, and no one familiar with the Penobscot salmon can be deceived with a fish from the provinces.

Salmon spawn only once in two years; eat nothing at all during that season, and therefore no food is found in them. They are laid upon the block when for sale, whole, and are sliced like beef from a dressed quarter. Such salmon as take the fly in rivers, therefore, take it undoubtedly in sport, and this accounts for the success which anglers often experience from a change of fly. But land-locked salmon, of course, being confined in fresh water always, must eat, and therefore take bait. Where the sea salmon gets its food no man knoweth. Nevertheless, as has been said, the flesh of the salmon of different rivers has different hues and different tastes.

One odd feature of this interesting industry is the method of packing for transportation. Oddly enough, the eggs are taken from the water. A box fifteen inches square and four inches high is made of some light material. A layer of one inch of moss is deposited in the bottom and a bit of wet mosquito netting thrown over it. Next a layer of eggs is put in, more mosquito netting is doubled back over them, then another layer of eggs, the process continuing until there are four layers of eggs—about 12,000 salmon in all. From four to six boxes—72,000 possible fish—are placed in a tier and these are packed in sawdust in one large case. These eggs may weigh ten pounds, and should all hatch and grow to be ten pounds fish, they would then weigh about 108 tons, which fact demonstrates a wonderful increase in nature. If sea salmon are treated the same way, and the hatching be attended with equally favorable results, the weight of the fish at maturity would be over 1080 tons, allowing thirty pounds for each fish. Salmon eggs packed as above, can be and are shipped to all parts of the world.—*New York Times.*

A Bulgarian Railway Episode.

When the railroad was built through Bulgaria, about twenty years ago, the whole business of constructing and running it was in the hands of the English. The contractor's habit of looking after everything personally greatly puzzled the Turks. They could not make out who were in authority. At one time, when a construction-train was to be run from a country station down to Varna, a local pasha came up to the man who was dispatching the train and asked for a passage. The favor was granted. Then the official wanted the train to wait until his baggage arrived. After a delay of an hour or so, a string of fifty bullock-carts appeared with "baggage." The Turk was promptly informed that the train could not take such a load, and would not take any part of it. The man in charge ordered the train to start. The pasha was left behind, indignantly threatening to complain to the manager. Two days later, the Turk was in Varna, inquiring for the superintendent of the railway. He found his way to the office, and was announced by a servant as "One great big pasha, he come see you, sare." It was not until after the injured pasha had seated himself that he discovered before him the very man whom he had come to complain of. The interview is reported by the guilty party. In a rage, the Turk turned to his servant, and said: "Eshek (ass), you have made a mistake!" "Yes, Effendi, I have—but they said this was the head man of the iron road." "Pah, pig, hold your tongue." Then, coldly turning to me, he said that he wished to speak in private to the manager of the railway. I at once asked my assistant to leave the room, but the pasha stopped him, and asked: "Who is the manager here?" I said: "I am, and I shall be most happy if I can be of service to you." The pasha gave a low whistle, and then, beginning to grin, said: "True? Then I have made a mistake. I called to complain to you of your own conduct the day before yesterday, and was going to ask for your dismissal. What shall I do now?" "Have coffee and a cigarette, and believe me it was only the utter impossibility of doing as you wished that forced me to leave you on the road."—*Argonaut.*

Bullock Racing in India.

In India the favorite animals, both for speed and endurance, are the native bullocks. The animals are small, wiry, muscular and swift. They are trained to races and run well, not only under the saddle, but in harness. The Indians are fond of racing their beasts, and the sport is encouraged by the English part of the population.

The animal is guided by a cord through the nose, but the driver places more reliance on whip and voice than on the cord. The Indians are natural gamblers, and will bet their last rupee on the result of a race, taking so much interest in it that a penniless native has been known to wager his liberty and that of his family for an entire year, and sell himself into voluntary slavery as the result of losing a bet.

The races are frequently attended with serious accidents, from the fact that, although the bullocks may be trained to great swiftness, it seems almost impossible to teach them to run in a straight line. They will bunch together, and thus frequently smash one or more of the vehicles.

Exciting as are the bullock races when the beasts are harnessed and driven by native drivers, they are far more so when the bullocks are ridden by European soldiers or sailors. The chief danger in a race of this description lies in the falls which are the almost inevitable result of an attempt to ride these awkward animals.—*New York Journal.*

Across the Ocean in Four Days.

The centrifugal propeller is the name of a new invention designed to enable steamers to attain extraordinary speed. Strictly speaking, the appliance is not a propeller at all; it is simply a remover of resistance ahead. The stem of the steamer is cut away downward and backward from the water line, and here the rotary fan, or centrifugal machine is placed. The pressure and resistance of the water ahead is got rid of by clearing the water way, thus virtually endowing the propulsive screw or screws in the stern with greatly augmented power.

In vessels moving at speeds up to seven knots, skin friction is the principal resistance in still water; in vessels moving at higher speed the resistance of the water immediately ahead increases at an enormous rate, with the increase of speed. This can always be noticed by the huge white wave a swiftly-moving vessel has in front of her—the "bone in her mouth" as the sailors term it. The object of the new invention is to scatter this retarding mass as it is being entered, and by this means, it is claimed, that the speed of steamers can be increased to the point that will admit of their crossing the ocean in four days. Vessels will be fitted with this new device for experimental purposes both in this country and in England, and it is expected that their speed will be greatly in excess of anything now afloat.—*New York Times.*

Fish Have Fun on Land.

Fish have been known to live a considerable time out of water. They are not absolutely comfortable out of their own element, but they sometimes take it into their heads to live on the land for a short time. The most famous land frequenting fish is the climbing perch of India, which not only walks out of the water but climbs trees by means of its sharp spines. It has a peculiar breathing apparatus which enables it to extract oxygen from the water and store it up for use while on land.

A singular walking fish is the periophthalmus of the tropical Pacific shores. At ebb tide he literally walks out of the water, and, erect on two legs, promenades the beach in search of stray crabs.—*New York Press.*

POPULAR SCIENCE.

The distinguished physician, Dr. W. H. Burt, announces that water is the great remedy for consumption.

Silk from paper pulp is made smooth and brilliant, with about two-thirds the strength of ordinary silk and about the same elasticity.

The famous Physick Garden in Chelsea, England, whose preservation is now a matter of discussion, has 20,000 different herbs and plants.

A permanent commercial museum, containing specimens of the natural products and manufactures of Poland and a bureau of information for Russian and foreign merchants, has been established at Warsaw.

A grand turning cupola eight meters in diameter is to be erected in the Vatican Garden, in Rome, Italy, for covering the photographic equatorial instrument which is to be used in connection with mapping out the stars.

It has hitherto been supposed that the maximum depth of the Mediterranean was 10,875 feet deep between Sicily and Sardinia. Lieutenant Magnachi, of Italy, has found a depth of 13,550 feet, between Malta and Candia.

The effect of gum chewing has been studied carefully by an expert. In gum chewing the masseter muscles which move the jaw are abnormally developed, and the fatty substance which produces fair, plump cheeks is deteriorated.

Geologists assert that if the continents and the bottom of the ocean were graded down to a uniform level the whole world would be covered with water a mile deep, so much greater is the depression of the ocean bed that the elevation of the existing land.

A writer upon birds says that in the fields and groves there are many old maids and bachelors who apparently never had any inducement to marry. There is no doubt that the rivalry in bird courtship is extremely keen, and the choice is a deliberate one.

The jelly fish absorbs its food by wrapping itself around the object which it seeks to make its own. The star fish is even more accommodating. Fastening itself to the body it wishes to feed on, it turns its stomach inside out and enwraps its prey with this useful organ.

An old manuscript volume of apothecaries' lore and household recipes, believed to date from about the time of Queen Elizabeth, was discovered some years ago among the papers of a firm of chemists in Newcastle, England, and a lithographed fac simile is soon to be published.

The woodpecker has a three-barbed tongue like a Fijian's spear, with which it draws out the worm which it has excited by its tapping. The clam feeds with a siphon, and the oyster with its beard. The tapeworm has neither mouth nor stomach, but just lies along and absorbs the already digested food through its skin.

In one of the leading locomotive shops there is now building an engine with an enormous driving wheel, nine feet in circumference, which will be fixed in the centre, in front of the boiler. Instead of ordinary axles the truck wheels will have bicycle spindles, and experts claim that the large driving wheel will carry along the train at over ninety miles an hour.

Clouds which are luminous in the darkness of moonless nights have been attracting considerable attention in Europe, and a number of photographs of them have been secured this year in Germany. From comparisons of results obtained at different observatories, it appears that these clouds have the extraordinary height of five and a half miles above sea level.

It is proposed to use the spectoscope to determine whether cesspools, stables, etc., drain into neighboring wells. A solution of carbonate of chloride of lithium is poured into the suspected sources of pollution in the neighborhood, and after a week or so the well water is examined spectroscopically for lithium, which can thus be detected even if the water holds in solution less than one pint in a million.

Beeswax From the Sea.

No one has ever been able to give an authentic account of how such enormous quantities of beeswax came to be deposited on the beach near Nehalem. Specimens are found along the beach in various places, but it is most plentiful near the mouth of the Nehalem. As the sea shifts the bar pieces of it are washed ashore, and large quantities are found by plowing some of the low land near the beach. There are spots where the sea has never reached in the memory of the oldest settlers, and which are covered with a good-sized growth of spruce, where deposits of the wax may be found by digging. Specimens of the wax may be found at the house of any settler on the beach, and to all appearances it is genuine beeswax. Several tons have been unearthed, and one man shipped a large amount to San Francisco once, for which he received $500. In quality it is as good as any in the market, and has retained its familiar odor through all its rough usages and age. It is supposed by some, and so stated, that it came from the wreck of a Spanish vessel over a century ago. Others say that it came from a wrecked Chinese junk. These traditions in regard to the wrecks come from the Indians and are not very reliable.—*Tillamook Headlight.*

Ancient Egyptian Glue and Veneering.

Among the many occupations of the carpenter, that of veneering is noticed in the sculptures of Thebes, as early as the time of the third Thothmes, whom I suppose to be the Pharaoh of Exodus, and the application of a piece of rare wood of a red color to a yellow plank of sycamore, or other ordinary kind, is clearly pointed out. And in order to show that the yellow wood is of inferior quality, the workman is represented to have fixed his adz carelessly in a block of the same color, while engaged in applying them together. Near him are some of his tools with a box or small chest, made of inlaid and veneered wood, of various hues, and in the same part of the shop are two other men, one of whom is employed in grinding something with a stone on a slab, and the other in spreading glue with a brush. It might, perhaps, be conjectured that varnish was intended to be here represented, but the appearance of the pot on the fire, the piece of glue with its concave fracture, and the workman before mentioned applying the two pieces of wood together, satisfactorily decide the question, and attest the invention of glue 3300 years ago.—*Scientific American.*